



UNITED STATES PATENT AND TRADEMARK OFFICE

[Handwritten signature]

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,188	03/18/2004	Hiroataka Oomori	33035M145	5110

7590 08/08/2005

Smith, Gambrell & Russell
Suite 800
1850 M Street, N.W.
Washington, DC 20036

EXAMINER

CHU, CHRIS H

ART UNIT PAPER NUMBER

2874

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,188

Applicant(s)

OOMORI, HIROTAKA

Examiner

Chris H. Chu

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/803,188.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

The prior art documents submitted by applicant in the Informational Disclosure Statement filed on March 18, 2004 have all been considered and made of record (note the attached copy of form PTO-1449).

Drawings

Twelve (12) sheets for formal drawings were filed March 18, 2004 and have been accepted by the Examiner.

Specification

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hakamada (4,403,243).

Regarding claim 1, Hakamada discloses an optical module, comprising:

- a package having a CAN-type shape (see Fig. 2), said package including a stem (base member 1 in Fig. 2), a sub-mount having a mounting surface (metal block 5 in Fig. 2) and a plurality of lead terminals (13 in Fig. 2), said sub-mount and said lead terminals being provided in said stem, said mounting surface substantially perpendicular to said stem;
- a thermoelectric device disposed on said sub-mount (cooling unit 6 in Fig. 2, and column 2, lines 21-24);
- a light-emitting device mounted on said thermoelectric device (semiconductor laser element 4 in Fig. 2, and column 2, lines 29-32).

Allowable Subject Matter

Claims 2-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art cited on attached form PTO-892 is the most relevant prior art known, however, the invention of these claims distinguishes over the prior art of record because none of the references either alone or in combination disclose or render obvious what is defined in these claims.

Claim 2 distinguishes over the prior art of record because it discloses a plurality of lead terminals co-axially disposed so as to surround the sub-mount, and an extension member fixed to one lead terminal disposed behind the sub-mount and electrically

connected to the thermoelectric device disposed on the front of the sub-mount. The prior art teaches a plurality of terminals co-axially disposed surrounding the sub-mount, but not with an extension member fixed to a terminal behind the sub-mount and that is electrically connected to the thermoelectric device disposed on the front of the sub-mount.

Claims 3-6 distinguish over the prior art of record because they disclose an extension member being an L-shaped or U-shaped metallic component having one side fixed to the lead terminals and the other side(s) detouring around a side surface of sub-mount and being electrically connected to the thermoelectric device in front of the sub-mount. Claims 7-9 disclose an extension member being an L-shaped or U-shaped metallic component, detouring around a top surface of the sub-mount and electrically connected to the thermoelectric device in front of the sub-mount.

Claims 10-11 distinguish over the prior art of record because they disclose the extension member having a hollow so as to fix the lead terminal thereto with solder and a groove for receiving excess solder.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris H. Chu whose telephone number is 571-272-8655. The examiner can normally be reached on 8:30-5:00 Mon-Fri.

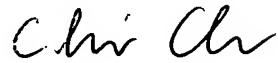
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-272-2344. The fax phone

Art Unit: 2874

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chris H. Chu
Patent Examiner
June 27, 2005




Michelle R. Connelly-Cushwa
Primary Patent Examiner
